

## What the Future Holds, and Who Will Stand and Fight?

by Major General B. B. Bell, Commanding General, U.S. Army Armor Center

Protecting America's national interests demands a robust set of land power options to face the uncertain operational environment of the 21st century. To meet these challenges, the Army and our Mounted Force have embarked on a modernization and transformation program that is unprecedented. As always, Armor Branch is on the cutting edge of efforts to hone the Army into a strategically responsive and dominant force at every point on the spectrum of operations. In this Commander's Hatch, I want to update you on the Year 2000 Mechanized Force Modernization Plan (MFMP), as well as describe a vision for the Future Combat System (FCS) that will arm the battalions and brigades that today's lieutenants and captains will command. Lastly, I want to address our future leadership opportunities and the immense potential for personal and professional growth being offered our company grade warriors as we transform the force in the exciting years ahead.

The first part of the Army's three-pronged Transformation Strategy (see the July/August 2000 Commander's Hatch) is the modernization of our current armor/mechanized force (sometimes referred to as the "Legacy Force"). The 2000 Mechanized Force Modernization Plan (MFMP) describes our proposed strategy for how the Mechanized Force should transform. This plan serves as a bridging strategy from today's Legacy Force, led by Abrams tanks and Bradley Fighting Vehicles, to tomorrow's Objective Force equipped with the Future Combat System. Armed with a rigorous analysis of the changing operational environment and a keen understanding of our new *FM 3.0 Operations* (draft), a super team of experts here at Fort Knox and within TRADOC formulated a strategy that ensures our current mechanized force can win our nation's wars and protect our vital national interests over the next 15-20 years as we bring on line our FCS-equipped Objective Force. Thorough battlefield functional area assessments yielded the following 12 priorities for our legacy force. While we realize that we must compete with other Army programs for prioritization and resources, we believe the fol-

lowing are essential to a dominant warfighting strategy over the next 15 to 20 years.

**1. Recapitalize through modernization upgrades (M1A2 SEP/M2A3) III Corps, consisting of three mechanized divisions and the 3rd ACR.**

**2. Fully digitize III Corps with three mechanized divisions and the 3rd ACR.**

*FM 3.0, Operations* (Draft) emphasizes decisive offensive operations and a viable strategic counterattack force. This requires that we focus key system upgrades and accelerated modernization efforts in a single corps — III Corps — as the first digitized corps (FDC). This force requires sufficient overmatch to bring armed conflict to a rapid conclusion on our terms. Units affected are 1st Cavalry Division, 4th Infantry Division, and 3rd Armored Cavalry Regiment for III Corps and the 3rd Infantry Division. The major weapon systems needed for these units are the M1A2 SEP, M2A3 Bradley, Crusader, M270A1 MLRS, AH-64D Pure, CH-47D, Grizzly, and Wolverine.

Key platform upgrades to the combined arms team are the M1A2 SEP and the M2A3 Bradley with information dominance through Integrated Combat Command and Control (IC<sup>3</sup>), 2nd Generation Forward Looking Infrared (2nd Gen FLIR) sights, Commander's Independent Thermal Viewer (CITV), and Far Target Locate (FTL) capability. Working within the combined arms team, these platforms provide the heavy force the combat power overmatch needed to conduct decisive warfighting while the Army transforms toward a full-spectrum capability.

**3. Develop and procure munitions that dominate the expanded close combat "Red Zone." (10-12 kilometers vice today's 3-4 km)**

Munitions are key to maintaining lethality overmatch. Failure to empower our force with appropriate munitions minimizes our investment in platform recapitalization and digitization. We require three new service rounds for the

Abrams tank to operate effectively in an expanded and more lethal "Red Zone:" 120mm Tank Extended Range Munitions (TERM), M829E3 APFSDS-T, and 120mm Canister.

*120mm Tank Extended Range Munition (TERM).* Our Armor Force requires a Tank Extended Range Munition to destroy enemy vehicles beyond the range of conventional KE rounds. The TERM will be used both in Extended Line of Sight (ELOS) and Beyond Line of Sight (BLOS) modes to destroy high priority targets out to 8 to 10 kilometers. The tank will need to be able to fire autonomously using the current second-generation FLIR with IC<sup>3</sup> on the M1A2 SEP in a fire and forget mode. The requirement for TERM is in response to the changing nature of the tactical, close battle. The operational environment has caused a 240 percent increase in the area of responsibility (AOR) of the division and a corresponding need to enable the mechanized task force commander to dominate his expanded battlespace with an organic weapon system. TERM enables the commander to expand and dominate the close combat 10 to 12 kilometer "Red Zone," with precision munitions. The intent is to attack key threat systems (reconnaissance, command and control, and leader platforms) as they enter the "Red Zone" then destroy the remaining formation in a traditional close fight with direct-fire KE rounds. The bottom line is that we cannot afford to concede the first 7 kilometers of the extended "Red Zone." TERM will punish key threat platforms over that full distance and expose their formation to total destruction in the last 3 to 4 kilometers of closure.

*M829E3.* The M829E3 is the Army's next-generation 120mm kinetic energy armor-piercing tank round. The M829E3 is a fin-stabilized discarding sabot round designed to counter enemy explosive reactive armor advancements and improve probability of kill at extended ranges. We expect to field it in FY 03. Advancements in propulsion and penetration are key elements of this program.

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An Abrams tank firing KE ammunition is widely regarded as the most effective anti-armor weapon in the world. The M829E3 round will provide greater armor penetration capability than its predecessors and will also improve accuracy out to greater tactical line of sight (LOS) ranges in the "Red Zone."

**120mm Canister.** We increasingly expect our Abrams tank to operate in close, complex, and urban terrain supporting assaulting infantry. As such, the M1A1/M1A2 requires a simple, quick means of engaging enemy infantry with an area weapon that provides a greater volume than the tank's machine guns or the organic weapons of friendly infantry. The intent is to quickly neutralize the enemy and shatter his morale. Used by tanks in previous wars, nothing does that better, close in, than thousands of steel balls, flechettes, and pellets launched with one pull of the trigger. Our need for an effective canister round spans the full spectrum of conflict, from small-scale contingencies to major theaters of war. Meeting the requirement will facilitate dominant maneuver and provide an offensive form of force protection. The Mechanized Force is currently unable to provide effective, rapid, lethal fire against massed assaulting infantry armed with hand-held anti-tank and automatic weapons at close range (500 meters or less). The current inability of the Abrams tank to defeat enemy infantry and close-in anti-tank systems reduces the survivability of the maneuver force and the infantry it supports. Canister will solve this problem. We hope to begin fielding the canister round in 2003-4.

#### **4. Recapitalize through rebuild (M1A1D/M2A2ODS) remaining mechanized containment and reinforcing forces (AC/RC).**

While Priorities One and Two address upgrades for our decisive counterattack force, our early entry and containment "first to fight" forces also require an adequate level of overmatch. The 1st Infantry Division, 1st Armored Division, and 2nd Infantry Division require recapitalization and digitization of current weapon systems. Additionally, the eight National Guard enhanced separate brigades and seven National Guard divisions require recapitalization as soon as practical.

Key M1A1D improvements include information dominance technologies with FBCB<sup>2</sup>, 1st GEN FLIR, FTL, BIT/FIT, GPS. Also critical is a rebuild program that brings the tank to "zero time" with limited modification and a

completely rebuilt engine. We also hope to gain approval for 2nd Gen FLIR for incorporation on the M1A1D.

The key capabilities of rebuilt systems for the Bradley ODS-D are information dominance, FBCB<sup>2</sup>, 1st GEN FLIR, FTL, GPS, Bradley tile protection enhancements, and a rebuild to zero time on the engine.

#### **5. Match Army Prepositioned Stocks (APS) with appropriate early entry containment force equipment.**

#### **6. Invest in adequate institutional, home station, and CTC training upgrades to ensure Mechanized Force readiness.**

The centerpiece of our institutional improvements is the Institutional Digital Education Program (IDEP), which will ensure leaders and staffs get the most out of the digital equipment coming online. The key components of the home station training upgrades will be a fixed tactical internet, Close Combat Tactical Trainers (CCTT's) for Company/Team Maneuver/Direct Fire Training, and Home Station Integrated Training Systems (HITS) to provide a CTC-like training experience. CTC training enhancements include a programmed upgrade and rebuild of infrastructure and equipment, an enhanced live fire capability for USAREUR, and MOUT capabilities.

#### **7. Ensure adequate obstacle reduction (Grizzly) and gap-crossing (Wolverine) capability in III Corps.**

#### **8. Develop and procure long-range indirect fire systems (Crusader) and munitions to enhance non-line-of-sight effects.**

#### **9. Acquire reconnaissance platform to provide III Corps with inter-netted ISR/target acquisition capability.**

#### **10. Invest in O&S cost reducers (common engine, built-in diagnostics reliability improvements).**

#### **11. Empower XVIII Corps with appropriate reconnaissance, surveillance and security cavalry capability.**

As discussed in last month's Commander's Hatch, we are diligently engaged in studying and recommending ways to transform the 2nd ACR into a more viable reconnaissance and security organization in the near term.

#### **12. Procure adequate battlefield recovery capability (Hercules) to outfit the III Corps counterattack force.**

We are satisfied that the MFM Plan lays out the best way ahead for our Legacy Force. These improvements will ensure the dominance of our current heavy force while we confidently apply resources to pursue the Objective Force armed with the Future Combat System.

Scheduled to initially enter the force around 2010, the FCS will be a radical departure from traditional combat vehicle design. The Defense Advanced Research Projects Agency (DARPA) and the Army have embarked on an ambitious program that will be a "system of systems" which leverages emerging technologies and has a built-in capability to incorporate future advances. Key to its success will be our ability to harness improvements in the distribution and effective use of information power. The commander of this force will achieve battlefield dominance through inter-netted sensors and shooters and the ability to quickly mass and combine fires to achieve tactical dominance.

Although much research has already been completed, we can't yet predict exactly what the FCS will look like or how it will work. We do know this much, however. It will continue to do what only ground forces can do: close with the enemy in a manner that leaves him no option but to yield or be destroyed.

One of the FCS "shooter" vehicles should be a direct-fire platform manned by soldiers trained in the best tanker and cavalry traditions. It will weigh less than 20 tons and be deployable by C-130 and tilt-rotor aircraft. It will have Line of Sight (LOS) and Beyond LOS (BLOS) lethality to defeat all Level One armor threats. Further, it will possess superior tactical and operational mobility regardless of terrain or operational area infrastructure. Even though it will weigh less than a third of the Abrams tank, the FCS will have greater survivability. How? By incorporating advanced counter detection/acquisition technologies such as electronic signature elimination and enemy target acquisition and fire control interdiction. Additionally, capabilities such as false target generation and more traditional passive, active, and reactive armor packages will enhance protection.

We can expect to see the first demonstration of applicable technologies in 2003.

The future of the mounted force is exciting and full of promise. Our important role in Army Transformation is just one more example of how the Army depends

heavily on our branch for ideas and leadership. The opportunities for growth, personal and professional satisfaction, and warrior leadership will grow and expand in our branch. For those who choose a career as an armor warrior, the future will provide opportunities just as monumental as the days when we transformed from the horse to the mechanized platform. Nonetheless, turbulence always accompanies change. With regard to our officer leaders, we've recently seen many fine captains leave our ranks. I'd like to address this captain attrition in the branch and give you some thoughts on why we want you to stay with our unique profession.

As of the 3rd Quarter of Fiscal Year 2000, the overall attrition rate for Armor captains stands at about 12% per year. This is 2% higher than the same time last year. The added 2% means that about 23 more captains will leave the Armor Force this year than left last year. While these increased losses won't effect our ability to fulfill Armor missions, they do concern me. Opportunities for excellence in leadership and personal satisfaction are in fact growing in the branch. We hope this increased attrition is an anomaly.

Numerous departing officers cite the large amount of time spent deployed from their family as a reason for leaving. Stabilization and support missions are noted as especially unpopular. Nonetheless, engagement throughout the world is a key tenet of our National Security Strategy, so these missions simply must be conducted to standard. PERSCOM now tracks every soldier's time spent deployed from home. Once that time goes over 180 days in any 12-month period, that trooper will return home as soon as possible.

Additionally, Reserve Component units participate in stability missions in increasingly large numbers. The recent success enjoyed in Bosnia by the 49th Armored Division of the Texas National Guard is but one example. Full use of the Total Army also allows us to address another shortcoming that factored in a number of decisions to separate: lack of combat training opportunities. With a decrease in stability and support deployments, (and the train-up necessary to complete them), warfighting skills can receive increased attention.

Another distracter named by those leaving the service is long hours spent in garrison performing non-METL tasks accompanied by personnel shortages. The Chief of Staff of the Army's goal to man TOE units at 100% by the end of

the year will go a long way to rectify this situation. Further, the Army has increased manning authorizations for units in the field. While "garrison activities" will always be with us, fully manned units will have more options available to meet them.

The most troubling reason given for leaving is a perceived "zero defect" command climate and a resulting culture of micro-management. Many came into the Army to lead soldiers and willingly shouldered the immense responsibility of command. Some of those separating, however, tell us that superiors more concerned with making sure nothing goes wrong on their watch have taken this responsibility away. Most importantly, they are frustrated because they feel senior leaders are either unwilling or unable to understand and address their concerns.

What are we doing to address the full range of concerns? This past year has seen approval of the largest package of pay raises and pay incentives since 1980. The redux retirement plan was repealed and the old 50% plan restored. Additionally, OPMS XXI provides officers alternate career choices and increases their chances for promotion in non-operations fields. It also dramatically increases battalion command opportunity for those officers who remain in their basic branches. While not specifically designed to eliminate a perceived "zero-defect" culture, increased pay and better opportunities for promotion lay the groundwork for a healthier command climate.

Still, the Army will remain in a state of change until the full benefits of OPMS XXI take effect and we gain fuller clarity on the course transformation will take. We've seen challenges like this before. The inter-war years of the 1920s and '30s are a great example. We were deployed throughout the world while simultaneously transforming into a mechanized force. Many officers were uncertain about the direction of the Army and what their role would be. However, had great officers like Patton, Eisenhower, Abrams, and Bradley given up, our successes on the battlefield during the Second World War may have been fewer and farther between, with much higher casualties. Fortunately, they, and thousands like them, stayed and led the Army to victory over arguably the greatest threat our nation has ever faced.

Today, together, we can make this great Army even better. I have a challenge for you, NCOs and officers alike.

If you see something wrong, tell your commander what the problem is and see if it is something that he can fix. If it is an institutional or systemic shortcoming, work to correct it in your current position. Use one of our Army's many avenues of communication to inform senior leaders of the problem so they can address the issue. I am personally interested in your views and concerns. Write me and I will do everything I can to positively impact the situation. Even better, challenge yourself to achieve a level where you can be even more influential in solving the problem.

Finally, take a hard look at the Army and yourself. Don't be afraid to talk to your superiors. Chances are many of them faced the same dilemmas you do today. I am convinced that your senior leaders will not penalize their subordinates for expressing their convictions. In fact, we invite dialog and highly encourage professional debate. We are all committed to eliminating the notion of a zero defects climate — real or perceived. The Army will always offer unique opportunities and camaraderie that you won't find in civilian life simply due to the nature of our profession. If you have the opportunity, talk to some officers who have recently come back on active duty voluntarily. Use their perceptions to help make your decision.

Certainly, the strong economy of the last few years has its appeal. Some tankers and cavalrymen legitimately determine the Army life isn't right for them or their families. Those officers deserve our thanks and any help we can give them to ease them into civilian life. Indeed, many of these former soldiers do a great job telling the Army story and helping our recruiting efforts.

In the final analysis, for all the personal reasons to stay in or depart the Army, one ideal looms large in the heart of any American who has sworn the commissioning or enlistment oath: Selfless service to our great nation. The notion of being part of something greater than ourselves motivated many of us to join the service in the first place. By any measure, we truly live in the greatest nation the world has ever seen. Certainly, we have our shortcomings. But overall, more people have more opportunities than any one of us can truly imagine. Armor officers and troopers are directly responsible for this prosperity. Your dedication and hard work make American freedom possible. We want to keep you on our winning team.

Forge the Thunderbolt and Strike First!